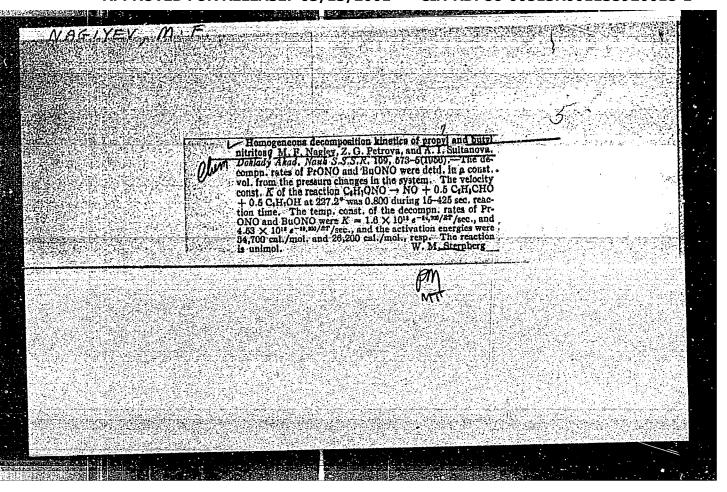
NAGITEV, M.F.; KARAMZIII, P.V.

Operational efficiency of heat exchangers with annular disphragratic space. Dokl. AN Azerb. SSR 12 no.11:811-847 '56. (MLRA 10:3)

1. Institut nefti AN Azerbaydzhanskoy SSR. (Heat exchangers)



 NAGIYEV. M.R., professor, akademik; TOPCHIYEV, A.V., akademik, redaktor; DOLGOV, V., redaktor izdatel'stva; PEVZHER, M., tekhnicheskiy redaktor

[Research in the processing of heavy petroleum residues and the chemical use of their products] Issledoveniia v oblasti pererabotki tiazhelykh neftianykh ostatkov i khimicheskogo ispol'zovaniia ee produktov. Baku, Izd-vo Akad.nauk Azerbaidzhanskoi SSR, 1957.
346 p. (MLRA 10:9)

1. Akademiya nauk Azerbaydzhanskoy SSR (for Magiyev)
(Petroleum industry--By-products)

SOV/124-58-1-776

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 99 (USSR)

AUTHORS: Nagiyev, M. F., Karamzin, P. V.

TITLE: Experimental Study of the Heat transfer Process in a Heat Exchanger

Having an Annular Working Space Subdivided by Cylindrical Diaphragms (Eksperimental noye izucheniye protsessa teploperedachi v teploobmen-

nom apparate s kol'tsevym diafragmirovannym prostranstvom)

PERIODICAL: Izv. AN AzerbSSR, 1957, Nr 2, pp 23:35

ABSTRACT: The authors propose a method for the intensification of the heat

transfer in a concentric-tube heat exchanger by setting up annular diaphragms on the inner surface of the outer tube. At the location of the diaphragm the liquid flows between the external surface of the inner tube and the opening of the diaphragm. A test setup and test results are described for the case of the heat transfer in such a heat exchanger with water. It is established that the total heat-transfer coefficient is multiplied by 3 to 5 times. From the analysis of the tables adduced it is apparent that the heat-transfer coefficient increases with increasing size of the opening in the diaphragm only

Card 1/2 up to a definite limit, beyond which a further enlargement of the

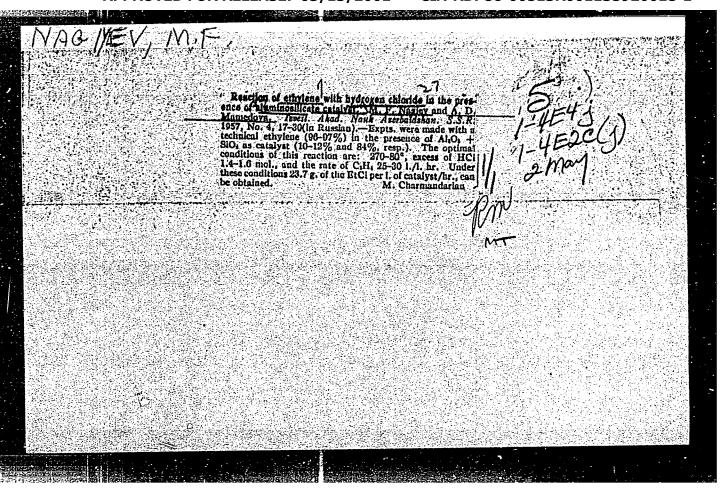
SOV/124-58-1-776

Experimental Study of the Heat-transfer Process in a Heat Exchanger (cont.)

diameter of the diaphragm leads to a reduction of the heat-transfer coefficient. The paper merely states the fact of the existence of a critical section of the diaphragm.

V. N. Bogin

Card 2/2



124 58 6-6772

Translation from: Referationaly zhurnal Mekhanika 1958, Nr. 5 574 USSR)

Nagivev, M. F., Karamzin, P. V. AUTHORS:

Determination of the Heat Transfer Coefficient of a Flow in a TITLE:

Tubular Space in a Trunsfrienal Hydrodynamic Regime (Opre delenive koeffitsiyen i tepli otdachi potoka trubnogo prostrinsiva

pri perekhodnom gidrodin imicheskom rezhime)

PERIODICAL: Izv. AN AzerbSSR 1957 Nr 5 pp 35-44

A method of calculation of the Nusselt number proposed by ABSTRACT:

the authors is described for a longitudinal flow along the sucface of pipes in a transitional hydrodynamic regime. The authors consider transitional a flow characterized by visies of the Reynolds number. R. in the range between 2-320 and 10,000. The proposed method is based on the assimption that within the abovedefined range of values of the R number . perturbation of the stability of the laminar flow does not affect the entire volume of the core of the flow. In connect of there with the authors allow the coexistence of regions of luminar and turbulent flow within the core of the flow. It is proposed that the Nusselt number for the transitional conditions be determined

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CIA-RDP86-00513R001135920018-1" APPROVED FOR RELEASE: 03/13/2001

Card 2/3

124-58-6 6772

Determination of the Heat Transfer Coefficient of a Flow (cont.)

as the sum of: N'  $\stackrel{\sim}{\sim} LN + TN$  . Here N' is the Nusselt criterion at  $R \simeq 2,320$  - 10,000;  $N_{\frac{1}{11}}$  is the same quantity for laminar flow at  $|R| \simeq 2/320;$  $N_{j,t}$  is the same quantity for turbulent flow at (R>10,000); the coefficients  $(L=1)^{j+1}$ and T characterize the distribution of the laminar and the turbulent flow regimes within the flow. The coefficients L and T are considered to be linear functions of the Reynolds number, R, of the liquid flow in the transitional state. The results of experiments carried out by the authors with water are compared with the experimental results obtained by I. T. Alad'yev, M. A. Mikheyev, and O. S. Fedynskiy (Izv. AN SSSR, Otd. tekhn. n., 1951. Nr 1). The experiments described were carried out with small variations of temperature between the inlet and outlet sections of the working region of the flow. In the analysis of the test data, a linear law of temperature variation in the stream in the direction of the flow was used. The value of the Nusselt number satisfying the laminar conditions  $(N_{11})$  was determined from the Zeeder and Tait formula, and that for the turbulent flow (N1,) was obtained from Kraussold formula as corrected by M. A. Mikheyev. No description of the experimental method or of the experiments is given in the article. The

experimental observations of the authors were analyzed according to the

124-58-6-6772

Determination of the Heat Transfer Coett.cient of a Flow (cont.)

usual methods of computation based on the introduction of a correction corefficient into the formula used for determining the value of N when R > 10,000. The values of the interction certificient were taken by the authors from the findings of V. M. Rimm. Teplochmennyle apparaty (Heat Exchangers). Goskhimizdat, 1948. From the curve included in the article it follows that the results of the experiments as calculated by the usual method correlate better with the results of the experiments by Aladyev. Mikhevev and Fedynskiy, than with those calculated by the mithod suggested by the authors.

M. D. Vavsman

- 1. Fluid flow--heat transfor
- 2. Hydrodynamic: research

Card 3/3

WHE 17 L. M. Methodology. History. Pointific A Institutions and Conferences. Teaching. Problems of Billio many and Scientific Documentation

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Original clay. An Azerk M., 1057, No. 10, 36-48.

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NAGIYET, M.Z., KARANCIN, P.V.

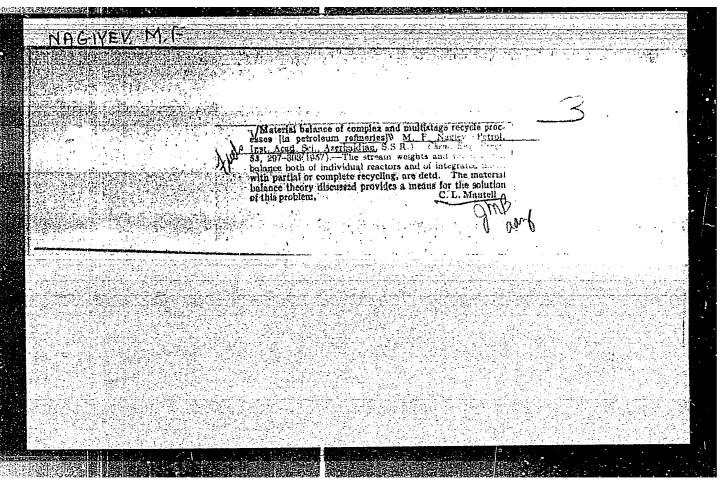
Reperimental study of pressure losses during the flow of liquids in annular disphragmatic space. Dokl. AN Azerb. SSR 13 no.8: 847-852 (MLHA 10:9)

1. Institut nefti Akademii nauk Azerbaydzhanekoy SSE.

(Heat exchangers)

HAGIYEV, M.F.; VECHKHAYZER, I.V.

Flowmeter for measuring small amounts of liquids during continuous flow under pressure. Dokl AN Azerb.SSR 13 no.10:1057-1061 '57 (MIRA 10:12) (Flowmeter)



#### CIA-RDP86-00513R001135920018-1 "APPROVED FOR RELEASE: 03/13/2001

NACIYEN Al. F.

20-3-43/59

AUTHORS:

Nagiyev, M.F., Member of the Academy of Sciences of the Azerbayazhan, SR, Shakhtakhtinskiy, T.N., Karamzin, P.V.

TITLE:

Development of the Theory of Recirculation Processes (Rezvitive

teorii retsirkulyatsionnykh protsessov)

PERIODICAL:

Doklady Akad. Nauk SSSR, 1957, Vol. 115, Nr 3, pp.576-579 (USSR)

ABSTRACT:

The method of calculation proposed here develops the theory of recirculation and makes possible an evaluation of the efficiency of an arbitrary complex chemical processing of raw materials not only within one single plant, but within the framework of different chemical processes which are tied together. The most general scheme represents a system of closely connected complex chemical processes. (See fig 1). Into this scheme quantities g<sub>10</sub>,g<sub>20</sub>...g<sub>w</sub>o are introduced, denoting charges 1,2....., of the reactors with an independent (prescribed) amount of raw material, and give, reactor charges with fresh raw material consist of the following

 $g_{Vo} = \sum g_{V \circ iV}, \quad g_{J \circ o} = \sum g_{V \circ iV}, \quad (1)$ mixture of components.

 $i_{\checkmark} = A_{\checkmark}, B_{\lor}, C_{\lor}...;$ = 1,2...m;

Card 1/3

The author arrives at a system of equations and solves it by dividing the system into two parts. After the total charges have been

Development of the Theory of Recirculation Processes.

20-3-43/59

computed, the amount of independent charges per component is to be calculated. A judgement can be given, to what extent the postulated production rates are covered by the raw material of the corresponding composition. If the production rates should not correspond to the amount of total charges, different production rates must be introduced and the system must be solved until there is correspondence between the amount of charge and the production rates; 2. The number of separate components of all kinds of fresh raw material with the exception of one component in each reactor, is determined from the formula (7), which is obtained from the introduction of the values of the total charges into the corresponding equations of the system. In this way the solution of the system is complete. For this purpose the following is necessary: a) by using the system (5), knowing the corresponding gon to determine the amount of fresh charge per component of each reactor with an independent supply.

b) knowing  $g_{V,n}$ , by using the system (3) the supply per component of each reactor with a dependent charge with fresh raw material is to be determined. All variants of the solutions of the system (4) in the manner detailed here are correct, if the addition of arbitrary m'-components is set equal to zero. Each variant demands, that the fresh supply of certain components is set equal to zero. They

Card 2/3

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Development of the Theory of Recirculation Processes. 20-3-43/59

cannot be known beforehand, because the amount of all the recirculant substances entering a reactor is unknown. If the variant centputed appears to be undesired, the fresh supply of other components must be set equal to zero and the problem must be solved as many times until the desired variant has been found. In general the recirculants must not be carried away, but the desired composition should be obtained by an addition of the missing components from outside. Very often it can be immediately found, which component in each reactor of a dependent system possesses a fresh supply, which equals zero. There are 2 Slavic references and 1 figure.

ASSOCIATION: Petroleum Institute of the AN Azerbaydzhan SSR (Institut nefti AN A-

zerb554)

SUBMITTED: February 11, 1957

AVAILABLE: Library of Congress.

Card 3/3

PHASE I BOOK EXPLOITATION

SOV/1766

Nagiyev, Murtuza Fatullayevich

Ucheniye o retsirkulyatsionnykh protsessakh v khimicheskoy tekhnologii (The Science of Recycling Processes in Chemical Technology) Moscow, Izd-vo AN SSSR, 1958. 243 p. 8,000 copies
printed.

Sponsoring Agencies: Akademiya nauk SSSR, and Akademiya nauk Azerbaydzhanskoy SSR, Institut nefti.

Resp. Ed.: A.V. Topchiyev, Academician; Ed. of Publishing House: A.L. Bankvitser; Tech. Ed.: T.V. Polyakova.

PURPOSE: This book is intended for scientists, technologists, and specialists in scientific research and project engineering institutes, as well as for manufacturers concerned with fundamental and special problems of chemical technology.

COVERAGE: The book contains theoretical and experimental data compiled by the author and intended to help solve the following

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5(1)

The Science of Recycling Processes (Cont.)

SOV/1766

general and fundamental problems in chemical technology: 1) evaluation of the effectiveness of any complex system of chemically processing various raw materials (the system must be suitable for application on an industrial scale), 2) pseudocontinuous determination of steady state parameters, reproducing their results and obtaining the necessary real values of this state for any complex system of processing raw materials even when qualitatively different raw materials are recirculated, and 3) effective treatment of an active reaction unit, based on simultaneously solving recirculation and kinetic chemical reaction equations. This would permit the determination of conditions which would guarantee maximum productivity per unit volume of reactor space and minimum formation of by-products. The theory and methods of studying recirculation processes in this monograph apply to dynamic (circulating) organic-chemical systems, but in equal measure, may apply to static systems which incorporate recirculation processes. These data have a common significance for all industrial chemical processes as well as for many problems of non-ferrous metallurgy, isotope chemistry and nuclear fuels. There are 14 references of which 12 are Soviet and 2 English. No personalities are mentioned.

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NAGIYEV. MF.

AUTHORS:

Golovkin, N. N., Ignat'yev, C. S.

507/30-58-9-37/51

TITLE:

Development of Researches on Highly Molecular Compounds
(Razvitiye issledovaniy po vysokomolekularnym soyedineniyam)
In the Presidium of the Council for Co-Ordination of

Scientific Work of the Academies of Sciences of the Union Republics and the Branches (V Prezidiume Soveta po koordinatsii nauchnoy deyatel'nosti akademiy nauk soyuznykh respublik

i filialov)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1958, Nr 9, pp. 101 - 104 ("SSR)

ABSTRACT:

The session of the presidium of the council took place on June 21st. A.V. Topchiyev, Vice-President of the AS USSR, stressed the importance of these researches in order to fulfil the resolutions of the plenary session of the TsK KPSS in May. He mentioned that the scope of researches at present carried out is insufficient. In order to prepare a prospective plan for the years 1959 - 1965 a special committee was set up. 42 main trends for researches on the subject of highly molecular compounds were fixed. The chairman of the scientific council V.A. Kargin, Member, Academy of

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Development of Researches on Highly Molecular Compounds. SOV/36-38-9-37=51 In the Presidium of the Council for Co-Ordination of Scientific Work of the Academies of Sciences of the Union Republics and the Branches

Sciences, USSR, reported about the activities of the council. Further addresses were given by: M.F. Nagiyev, Vice-President of the AS Azerbaydzhan SSR, on the urgency to intensify researches on the field of technological phenomena. S.D.Mekhtiyev, Head of the Petroleum-Institute of the AS Azerbaydzhan SSR, on the efforts in the field of petrol-um V.I.Nikitin, Head of the Institute of Chemistry of the AS chemistry. Tadzhikskaya SSR, requested assistance in training scientific A.Ye.Arbuzov, Chairman of the Kazan' Branch of the AS USSR, mentioned the problem of proper assignment of scientific Kh.U.Usmanov, Head of the Institut khimii rastitel'nykh staff. veshchestv Akademii nauk Uzbekskoy SSR(Institute of Chemistry of Veretable Materials of the AS Usbekskaya SCR., outlined the tasks of Usbekistan scientists in connection

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Development of Researches on Highly Molecular Compounds. SOV, 30-30-9-37,51 In the Presidium of the Council for Co-Ordination of Scientific Work of the Academies of Sciences of the Union Republics and the Branches

with the rich supply of cellulose and natural gases. R.D.Obolentsev, Chairman of the Bashkirskiy filial Akademii nauk SSSR (Bashkiriya Branch of the AS USSR), spoke about the urgency to intensify researches on the sulphurous petroleum deposits of Bashkiriya. Member, Academy of Sciences, Belorusskaya N.F.Yermolenko, SSR, stressed the problems of development of the chemical industry of his country in connection with her deposits of turf and petroleum. Yu. Yu. Matulis, President of the AS Litovskaya SSR, remarred that Lithuania (Litva) is rich in vegetable raw materials, on this field. thus has to itensify her research S.A.Giller, Corresponding Member, AS Latviyskaya SSR, informed the assembly of the intention of Latvia (Latviya) scientists to carry out research on the use of natural polymers. A.T.Kyll, Head of the Institute of Chemistry of the Academy of Sciences, Estonskaya SSR, mentioned problems in connection

Card 3/5

Development of Researches on Highly Molecular Compounds. SOV/2c-3c-3-37/51 In the Presidium of the Council for Co-Ordination of Scientific Work of the Academies of Sciences of the Union Republics and the Branches

with the use of the slates of Estonia (Estoniya). G.M.Shchegolev, Head of the Institute of Heat Energetics of the Academy of Sciences, Ukrainian SSR, recommended to lay more stress upon the use of coal and other solid fuels for the production of polymeric material.

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sov/30-58-9-37/51

Development of Research on Highly Molecular Compounds

In the Presidium of the Council for Co-ordination of Scientific Work of the Academies of Sciences of the Union Republics and the Branches

I.P. Bardin, Member, Academy of Sciences, USSR, Vice-President of the AS USSR, pointed out the importance of coal and wood as raw materials for the production of polymeric material. At last the chairman of the Council, A. N. Nesmeyanov, Member, Academy of Sciences, USSR, addressed the assembly and said that the whole scientific staff has to be employed for the development of chemistry. But it is necessary to recruit new scientists for the staff in order to avoid a removal of scientists from tasks likewise important. A resolution was passed to ask the Presidium of the AS USSR for its assistance in training adequate scientific personnel.

Card 5/5

MAGITEV, H.F.; MAMEDOVA, A.D.

Equation of the rate of a reversible bimolecular heterogenous catalytic reaction in a flow. Dokl. AN Azerb. SSR 14 no.1:23-30 '58.

(MIRA 11:2)

1. Institut nefti AN Azerbaydzhanskoy SSR.

(Chemical reaction, Rate of) (Petroeleum industry)

MADIYEV, I. F.

"The Theory of Concex Recipculation Processes of Petrocerical Concess."

Report submitted at the Fifth or Invetroleus Jongress, 3C Lay = 5° June 1999. Hew York.

NAGIYEV MF

11(4);5(3)

PHASE I BOOK EXPLOITATION

gov/2624

Topchiyev, Aleksandr Vasil'yevich, Murtuza Fatullayevich Nagiyev, and Togrul Neymat ogly Shakhtakhtinskiy

Znacheniye nefti v proizvodstve sovremennykh sinteticheskikh materialov (Importance of Petroleum in Production of Modern Synthetic Materials) Moscow, Izd-vo AN SSSR, 1959. 126 p. (Series: Akademiya nauk SSSR. Nauchnopopulyarnaya seriya) Errata slip inserted. 15,000 copies printed. Ed. of Publishing House: B. E. Davydov; Tech. Ed.: I. A. Makogonova.

PURPOSE: This booklet is intended for persons studying problems of petroleum conversion and production of petroleum chemicals.

COVERAGE: The booklet describes the development of petroleum chemical synthesis, the chemical composition of crudes, different methods of crude oil conversion to obtain such synthetic materials as plastics, synthetic rubber, synthetic fiber, synthetic washing agents, and various perfumes and drugs. Further, the booklet discusses the fundamentals of the chemistry of hydrocarbons and their derivatives, and describes different petroleum conversion processes, such as cracking, pyrolysis, platforming, dehydration, polymerization, etc., the by-products of which are used in industrial organic

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Importance of Petroleum (Cont.) sov/2624	
synthesis. Appendix contains numerous tables listing the characteristics of different hydrocarbons. There are $\theta$ references, all Soviet.	
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Importance of Petroleum (Cont.)

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MAGIYEV, M.F.; SHAKHTATINSKIY, T.N.; KANDALOVA, V.D.; KMOFF, L.A.

Applying the theory of recirculation processes to the development of complete flow systems for the production of polymer compounds. Azerb.khim.zhur. no.1:3-10 '59.

(Polymers)

(Polymers)

NAGITEV. M.F.; ABBASOVA, B.G.; KULIYEVA, V.G.

Using hydrogenation methods for determining the hydrocarbon group composition of petroleum products containing unsaturated compounds. Azerb.khim.zhur. no.2:17-27 '59.

(MIRA 13:6)

(Petroleum products) (Hydrocarbons)

NAGIYEV, M.F.; MAMELOVA, A.D.; KULIYEVA, V.G.

Kinetics of the hydrochlorination of ethylene on an aluminosiliocatalyst. Azerb.khtm.zhur. no.3:29-36 '59. (MIRA 1. 9) (Ethylene) (Hydrochloric acid)

5(0)

sov,/30+19--/-,/61

AUTHOR:

Nagiyev, M. F., Academician AS

azerbaydznanskaya SSR

TITLE:

The Theory of Recirculation Processes and Their Importance to the Development of Chemical Technology (Unherspace or retained latsionnykh protsessakh i yego znacheniye diya radyatiya

khimicheskoy tekhnologii)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1959, Nr 3, pp 59-56 (USSR)

ABSTRACT:

Modern chemical technology is primarily characterized by multistage and recirculation processes, similar to the organic synthesis of many plastics. The technological problems of these processes may be solved only by theoretical and experimental methods of the theory of recirculation. By experiments it was found that the four-stage process of synthesizing dimethyl terephthalate may be realized in two stages in oxidation and etherification reactors (Fig 1). The author of this article was the first to establish the theory of recirculation processes in chemical technology, as may be seen from papers previously published by him (Ref 1). Further, he describes the principles of this theory, the directions of its development and prospects of application to various problems of onemical

Card 1/2

The Theory of Recirculation Processes and Their Importance to the Development of Chemical Technology

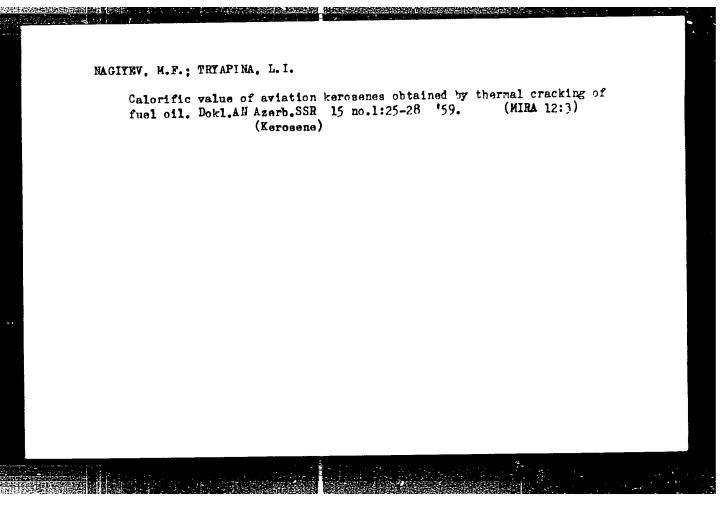
engineering. He refers to the following problems herein: the general theory of recirculation processes (see scheme in figure 2); the law and the regularities of the reduction of composed mixtures; experimental determination of the parameters of the stabilized state of chemical processes (see scheme in figure 3); devising of the technological elements of this process which secure high efficiency per unit of the reaction volume. The theory of recirculation processes is of general importance to all branches of chemical technology. It may be employed for problems of the chemistry of isotopes, nuclear fuel, etc since these also represent multi-stage processes. The author assumes that this theory may also help to solve theoretical and practical questions of some merely paysical problems of chemical technology, that is to say, it may be useful for the establishment of the technology of producing new kinds of plastics. There are 3 figures and 1 Soviet ref-

Card 2/2

NAGIYEV, M.F.; KARAWZIN, P.V.; GUSEYNOVA, A.M.

Determination of operating conditions for the thermal stability of a steady state of exothermic reactions. Azerb.khim.zhur. nc.6: 33-40 '59. (Heat of reaction)

(Heat of reaction)



WAGIYEV, M.F.; TRYAPINA, L.I.

Group structure composition of aviation kerosenes obtained by the cracking of mazuts. Dokl.AH Agerb.SSR 15 no.2:119-123 '59.

(MIRA 12:5)

1. Institut nefti AN AgerSSR.

(Kerosene)

NAGIYEV, M.F.; MAMEDOVA, A.D.

Experimental investigation of the reaction of ethylene hydrochlorination under pressure. Dokl.All Azerb.SSR 15 no.3:201-211 (MIRA 12:5)

1. Institut nefti All AzerSSR. (Ethylene) (Hydrochloric acid)

NAGITEV, M.F.; MAMEDOVA, A.D.; KULIYEVA, V.G.; KNOPF, L.A.

Investigating the reaction of ethylene hydrochlorination over aluminum-bismuth catalysts. Dokl.AN Azerb.SSR 15 no.3:213-218 (MIRA 12:5) '59.

1. Institut nefti AN AzerSSR. (Sthylene) (Hydrochloric acid) (Aluminum) (Bismuth)

NAGIYEV, M.F.; KULIYEVA, V.G.; KALYUZHNAYA, N.V.; MAMEDOVA, A.D.

Determining the length of serviceability of alumina-bismuth catalysts in the hydrochlorination of ethylene. Dokl. AN Azerb. SSR 15 no.4:293-297 '59. (MIRA 12:6)

1. Institut nefti Akademii nauk Azerbaydzhanskoy SSR.
(Ethylene) (Hydrochloric acid) (Catalysts)

NAGITEV, M.F.; KULIYEVA, V.G.; ABBASOVA, B.G.

Using the nonselective hydrogenation methods for determining the hydrocarbon group composition of bright petroleum products containing nonsaturated compounds. Azerb. neft. khoz. 38 no.5:33-35 My '59.

(Hydrogenation) (Hydrocarbons)

NAGIYEV. M.F.; ABEASOVA, B.G.; KULIYEVA, V.G.

Using the selective and nonselective hydrogenation methods for studying the hydrocarbon group composition of the kerosene fraction. Azerb. neft. khoz. 38 no.6:36-39 Je '59. (MIRA 12:10) (Hydrogenation) (Hydrocarbons) (Kerosene)

NAGITEV, M.F.; KARAMZIN, P.V.; SHAKHTAKHTINSKIY, T.N.

Laws of recycling processes in chemical technology. Azerb.
khim.zhur. no.2:11-21 '60. (MIRA 14:8)

(Chemical reaction—Conditions and laws)

(Petroleum—Refining)

NAGIYEV, M.F.; GADZHIYEV, T.A.; GUSEYNOV, N.G.

Synthesis of vinyl chloride by the conjugated dehydrochlorination of 1, 2-dichloroethane and by hydrochlorination of acetylene.

Azerb.khim.zhur. no.3:11-18 '60. (MIRA 14:8)

(Ethylene) (Ethane) (Acetylene)

Application of the theory of the steady-state thermal conditions of exothermic reactions to the solution of practical problems. Azerb.kim.zhur. no.4:69-74 \*60.

(Ethylene oxide) (Thermochemistry)

NAGIYEV, M.F.; TRYAPINA, L.I.; ASLANOVA, N.F.

Determination of the kinetic characteristics of thermally cracked fuel oils. Azerb.khim.zmr. no.5:57-63 '60. (MIRA 14:8) (Petroleum as fuel)

NAGIYEV, M.F.; TRYAPINA, L.I.; RASULBEKOVA, T.I.

Optimum decomption product yield in the thermal cracking of fuel oils. Azorb.khim.zhur. no.6:91-97 '60. (MIRA LA:8)

(Petroleum as fuel) (Cracking process)

NAGIYEV, M.F.; ZEYNALOV, M.F.; DADASHEVA, Z.A.

Study of the liquid phase oxidation of the distillate obtained in a light thermal cracking of fuel oils. Trudy Inst.khim. Ali Azerb.-SSR 18:90-106 '60. (HIRA 14:9) (Petroleum as fuel) (Oxidation)

NACIYEV, M.F.; TOPCHIYEV, A.V., akad., red.; DEMENT'YEVA, L., red. izd-va; ISMAILOV, T., tekhn. red.

[Chemistry, technology and calculation of processes for the synthesis of motor fuels] Khimiia, tekhnologiia i raschet protsessov sinteza motornykh topliv. 2., perer. i dop. izd. Baku, Izd-vo Akad. nauk Azerbaidzhanskoi SSR. Vol.1. 1961. 368 p. (MIRA 14:12) (Motor fuels)

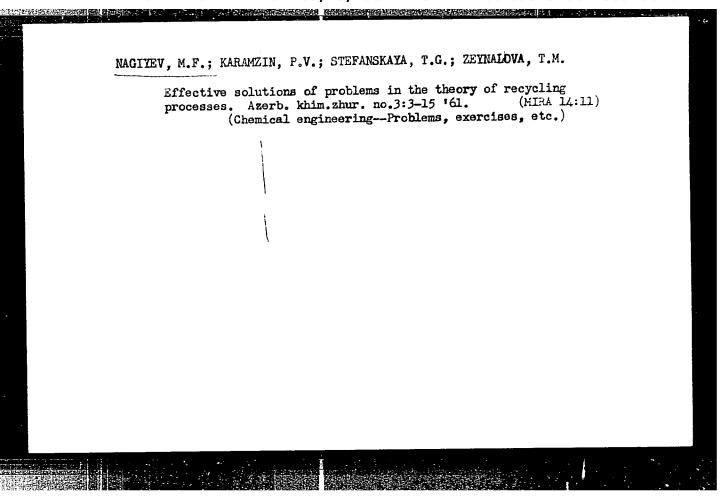
NAGIYEV, M.F.; TOPCHIYEV, A.V., akademik, red.; SHTEYNGEL', A.S., red. izd-va; AKHMEDOV, S., tekhm. red.

[Principles of the development of complex chemical processes and designing of reactors]Osnovy razrabotki kompleksnykh khimicheskikh protsessov i proektirovaniia reaktorov. Pod red. A.V. Topchievs. Baku, Azerbaidzhanskoe gos. izd-vo, 1961. 489 p. (MIRA 15:12)

(Chemical reaction—Conditions and laws)
(Chemical reactors)

New method of calculating unit operations in the manufacture of sulfuric acid by the contact process. Azerb.khim.zhur. no.1:71-76 '61. (MIRA 14:8)

(Sulfuric acid)



s/081/62/000/007/019/033 B168/B1C1

Nagiyev, M. F., Vechkhayzer, I. V., Sadykhova, S. A. AUTHORS:

Experimental research into the process of stabilization by TITLE:

hydrogenation of the middle fractions from light thermal

cracking of mazut

Referativnyy zhurnal. Khimiya, no. 7, 1962, 536-539, abstract 7M109 (Azerb. khim. zh., no. 4, 1961, 61-73) PERIODICAL:

The kinetics of the process of stabilization by hydrogenation of the 135-300°C fractions from light thermal cracking of mazut with an Al-Co-Mo catalyst in the temperature range of 320-400°C and at a pressure of 20-100 atm with various mazut/hydrogen ratios was studied in the laboratory. The influence of the thickness of the catalyst layer on the degree of conversion of the unsaturated hydrocarbons was shown. The optimum conditions for the process (those causing no appreciable destructive changes and which result in stabilized products almost entirely free from unsaturated and sulfur compounds) were as follows: pressure 100 atm, temperature 400°C, molar mazut/hydrogen ratio = 1:1.5; volume flow rate

Card 1/2

Experimental research into the ... S/081/62/000/c07/019/033 B168/B1C1

1.0-1.5 l/l·hr. A diagram of the apparatus is given. [Abstracter's note: Complete translation.]

Card 2/2

NAGIYEV, M.F.; KANDALOVA, V.D.

Theory of recircling applied to the calculation of zinc
production by the pyrometallurgical method. Azerb.khim.zhur.
production by the pyrometallurgy)

(MIRA 15:5)
(Zino-Metallurgy)

ALIKHANOV, E.N.; ARUSHANOV, N.A.; AKHUNDOV, V.Yu.: ALIZADE, M.A.; AZIZBEKOV, Sh.A.; BAGIROV, M.A.; VEZIROV, S.A.; VOLOBUYEV, V.R.; VEKILOV, F.M.; GADZHIYEV, N.M.; GUSEYNOV, D.M.; GUSEYNOV, I.A.; DADASHEV, K.K.; DADASHZADE, M.A.; DALIN, M.A.; ISKENDEROV, M.A.; KAZIYEV, M.A.; KARAYEV, A.I.; KASHKAY, M.S.; KEL'DYSH, M.V.; KERIMOV, A.G.; LEMBERANSKIY, A.D.; MAMEDOV, G.K.; MEKHTIYEV, M.R.; MIRZOYEV, S.A.; NAGIYEV, M.F.; NASRULLAYEV, N.I.; OGUDZHEV, A.K.; RADZHABOV, R.A.; RUDNEV, K.N.; SADYKHOV, R.N.; SEMENOV, N.N.; TOPCHIYEV, A.V.; TOPCHIBASHEV, M.A.; TAIROVA, T.A.; KHALILOV, Z.I.; EFENDIYEV, G.Kh.; SHUKYUROVA, Z.Z.

NAGIYEV, M.F.; KANDALOVA, V.D.

Applying the theory of recycling to the calculation of zinc production by the hydrometallurgical method. Azerb.knim.zhur. no.6:95-103 '61. (Zinc--Metallurgy)

(Xinc--Metallurgy)

NAGIYEV, M.F.; KARAMZIN, P.V.; STEFANSKAYA, T.G.

Development of the theory of recirculatory processes in chemical technology. Dokl. AN Azerb. SSR 17 no.6:471-478

'61. (MIRA 14:8)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

(Chemistry, Technical)

38631: 3/081/62/000/000/003/075 £166/3144

11.0140. าแบบเป็น

F., Vechkhayzer, I. V., Gadykhova, J. A.

TITLE:

Production of diesel fuels from the medium fractions in light

thermal cracking of the residue

Reforativnyy zhurnal. Khimiya, no. 9, 1962, 516, abstract 3. 171 (Dokl. .. Azerbeda, v. 17, no. 3, 1961, 651 - 666) FI HOUTCHE

TEXT: It is shown that hydrostabilization of the medium fractions in light thermal cracking of the residue (the 135 - 300 C and 200 - 350 C fractions) separated from gasoline + kerosine and kerosine + reflux mixtures, respectively, served as raw material) over an Al - Co - Mb catalyst under previously established optimum working conditions make it possible to obthin protic-grade and winter-grade diesel fuels which fulfill the (GC)T) requirements and greatly surpass them with respect to cetane numbers. The same on he done over .52, subject to various working conditions and

followed by dewaxing with carbamide. The yield of diesel fuels from these specific fractions is considerably higher with Al - Co - mo then with mag

Card 1/2

ALIPHANOV, W.M.; ARDSHAN V. N.A.; AFFUNDOV, V.Yu.; ALIZADF, M.A.; AZILBEROV, Sh.A.; DEGIROV, M.A.; VEZIROV, C.A.; VOLOBUYEV, V.A.; EMILOV, F.M.; SADZELYEV, M.A.; DALIM, M.A.; ISPENDREV, I.A., DADAGLEV, F.M.; DADASHZADF, M.A.; DALIM, M.A.; ISPENDREV, M.A.; AZIYEV, M.A.; PARAYEV, A.I.; KASURAY, M.S.; KEL'DYSE, M.V.; EERIT V. A.G.; IEMBERANSKIY, A.D.; RAMEDOV, G.F.; MERETIYEV, M.R.; FIRZOVE, S.A.; NAGIYEV, M.F.; NESRUHAYEV, M.I.; ORLDZHEV, A.R.; FIRZOVE, S.A.; RUDNEV, K.N.; SADYKHOV, A.N.; SEMENOV, N.D.; TOTO TIFV, A.V.; TOFCHIBASHEV, M.A.; TAIROVA, T.A.; KFALILOV, L.I.; FERNDIYEV, J.Kh.; SPUFYUROVA, Z.Z.

IUsif Geidarovich Mamedaliev; Oritu. Dokl all azerb SSR 17 no.12:1123-1126 '61 (Mamedaliev, Justi Deidarovich, 1905-1961)

NAGIYEV, M.F.

Contemporary problems of the technology of petrochemical synthesis.

Apport presented at the 12th Conference on high molecular-weight compounds devoted to monomers, Baku, 3-7 April 62

NAGIYEV, M.F., akademik; TOPCHIYEV, A.V., akademik, red.; SHTEYNGEL', A.S., red. izd-va; BAGIROVA, S., tekhn. red.

[A wonderful substance; basic concepts of petroleum, petro-chemical synthesis, and polymeric materials]Chudesnoe veshchestvo; osnovnye poniatiia o nefti, neftekhimicheskom sinteze i proizvodstve polimernykh materialov. Izd.2. Baku, Azerbaidzhanskoe gos.izd-vo, 1962. 328 p. (MIRA 15:12)

1. Akademiya nauk Azerbaydzhanskoy SSR (for Nagiyev).
(Petroleum chemicals)

PHASE I BOOK EXPLOITATION

SOV/6036

#### Nagiyev, Murtuza Fatulla

- Teoreticheskiye osnovy retsirkulyatsionnykh protsessov v khimii (Theoretical Principles of Recycling Processes in Chemistry) Moscow, Izd-vo AN SSSR, 1962. 332 p. 3000 copies printed.
- Sponsoring Agency: Akademiya nauk SSSR and Akademiya nauk Azerbaydzhanskoy SSR.
- Resp. Ed.: A.V. Topchiyev, Academician; Ed. of Publishing House:
  A.L. Bankvitser; Tech. Eds: A.I. Makagonova and T.V. Polyakova.
- PURPOSE: This book is intended for engineers in the chemical, mining, metallurgical, and other industries and specialists in plant management.
- COVERAGE: The book reviews problems in the use of the recycling theory to determine the most economically feasible methods of

Card 1/4

Theoretical Principles of (Cont.)

SOV/6036

3

utilizing natural raw materials It includes theoretical calculations and flow diagrams. The introductory part of the text discusses several aspects of the problem in detail: 1) recycling as a method of completely converting raw materials and increasing the yields of main products of chemical reactions; 2) application of recycling methods in laboratory studies of chemical reactions; 3) study of multistage complex processes (where simple and complex recycling are defined); 4) recycling theory as a basis for developing complex processes and selecting optimum processes; 5) application of recycling for increasing reactor efficiency; and 6) the use of recycling theory to solve problems in science and technology. No personalities are mentioned. There are 24 references: 21 Soviet and 3 English.

TABLE OF CONTENTS [Abridged]:

Introduction

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Ch. IV. Theory of Recycling Processes Which Combines Systems With Restricted and Unrestricted Feed- stock Composition	123
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Theoretical Principles of (Cont.)

SOV/6036

Ch. IX. Development of Elements of the Technological Process Which Will Make For High Output per Unit Volume of Reactor Space

**2**56

[References]

326

AVAILABLE: Library of Congress (TP145.N3)

SUBJECT: Chemistry

Card 4/4

BN/pw/bmc 10-31-62

# S/081/63/000/004/047/051 B156/B180

AUTHORS: Sagiyev, M. P., Petrova, Z. G., Tryapina, L. J.,
BRORYEVA, A. A., Aliyeva, K. Ya., Abubekirova, R. U.

TITLE: Determination of the optimum; amounts of initiater and emulsifier for the suspension polymerization of divinylbenzenes

PERIODICAL: Referativnyy shurnal. Khimiya, no. 4, 1963, 617 - 618, abstract 4T154 (Azerb. khim. zh., no. 1, 1962, 99 - 103

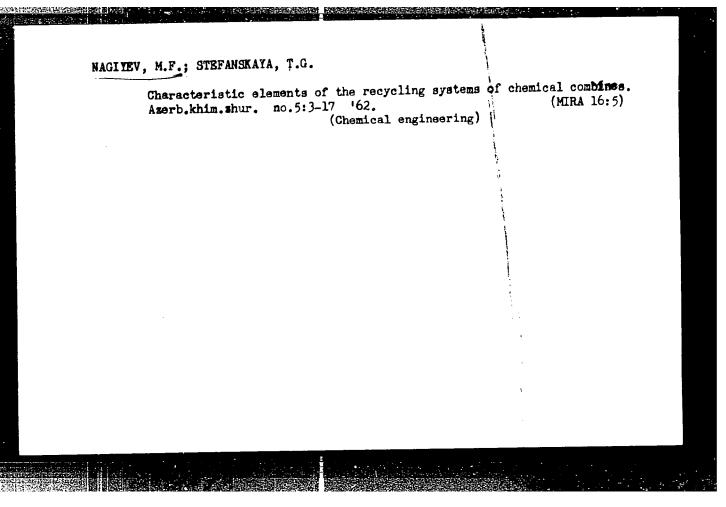
TEXT: The suspension polymerization of divinyl benzene in the presence of an initiator, isopropylbenzene hydroperoxide (0.25 - 2 %), and an emulsifier, the Na salt of dibutylnaphthalene sulfonic soid (0.25 - 2 wt.%) was used to accelerate the process of polymerization of divinyl benzenes. The polymerization process was conducted at 90 and 96°C, the experiment lasted 6 h, and the mixer was rotated at 600 rev/min. The optimum reaction conditions for the maximum yield of polymer with 0.3 - 1.5 mm grains are: 1.5 wt.% of initiater; 0.1 - 0.25 wt.% of emulsifier; 90 - 98°C. [Abstracter's note: Complete translation.] Card 1/1

NAGIYEV, M.F.; PETROVA, Z.G. TRYAPINA, L.I. BABAYEVA, A.A., ALIYEVA, K.Ya.

Effect of some factors on the yield of polymers and on their
granulometric composition in the suspension polymerization of
divinylbenzenes. Azerb.khim.zhur. no.2:71-79 162. (MIRA 16:3)
(Benzene) (Polymerization) (Particle size determination)

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001135920018-1"



S/249/62/018/001/002/003

1001/1201

**AUTHORS:** 

Nagiyev, M. F., Kandalova, V. D., and Kengerli, A. S.

TITLE:

Recirculation calculations of a system of reactors for the fission of plutonium

PERIODICAL:

Akademiya nauk Azerbaydzhanskoy SSR. Doklady, 18, no. 1, 1962, 17-20

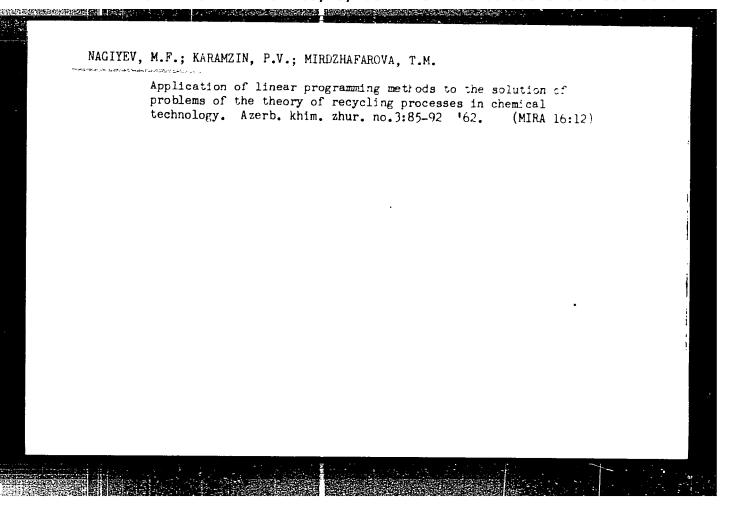
TEXT: Flow-sheets of two reactors and equations for material balances for the systems are given. The amount of fission products removed is equal to the charge of U238. There are 2 figures. The English-language reference is: Monson Benedict. Ind. and Eng. Chem., 45, 11, 2372, 1953.

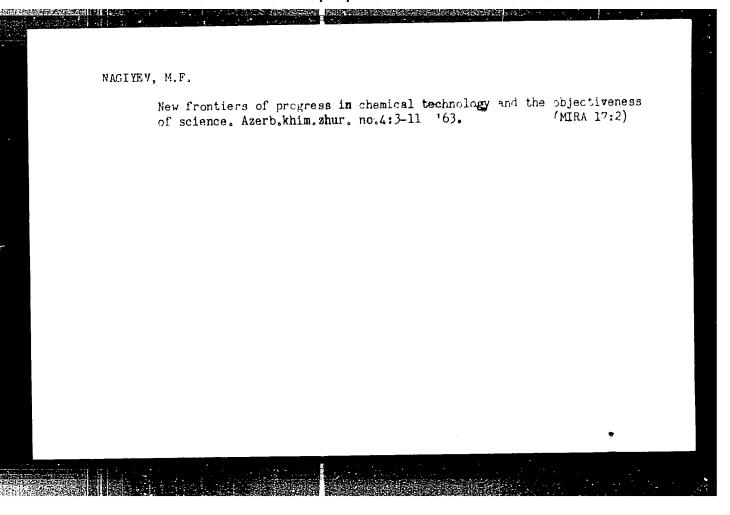
ASSOCIATION: Institut neftekhimicheskikh protsessov (Institute of Petrochemical Processes)

SUBMITTED:

November 28, 1961

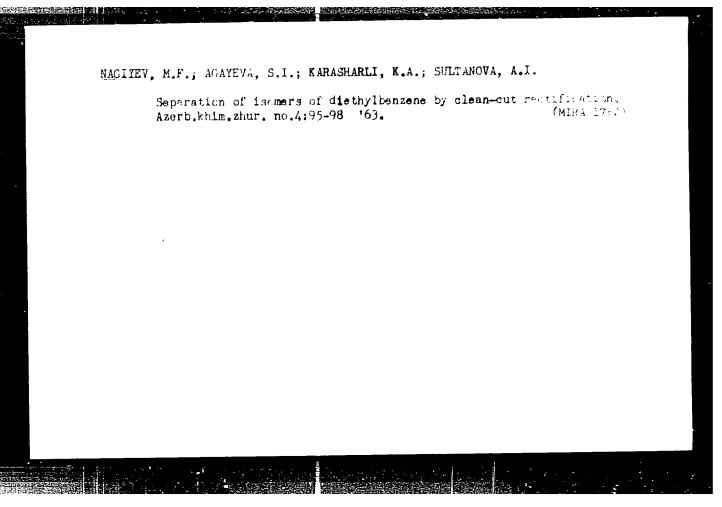
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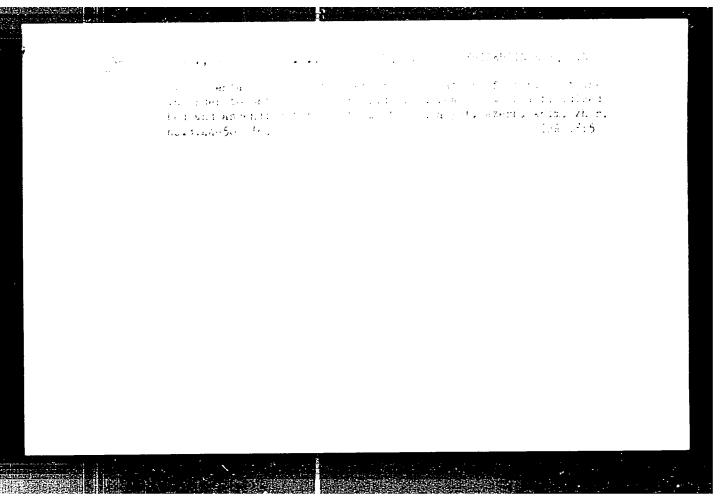
NAGIYEV, M.F.; SHNULINA, L.V.

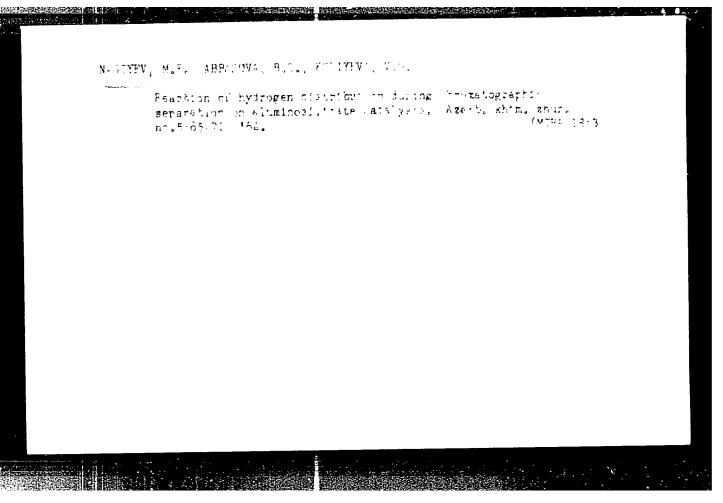
Predetermination of the validity of designs of recircling systems.
Azerb.khim.zhur. no.4:13-19 '63. (MI the 17:2)

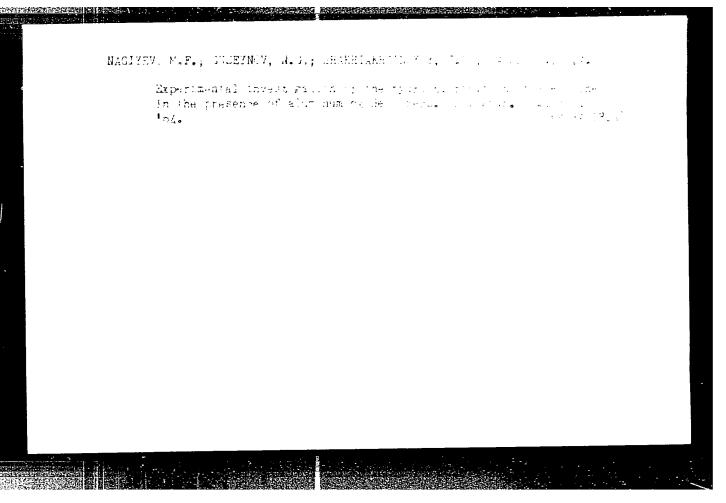


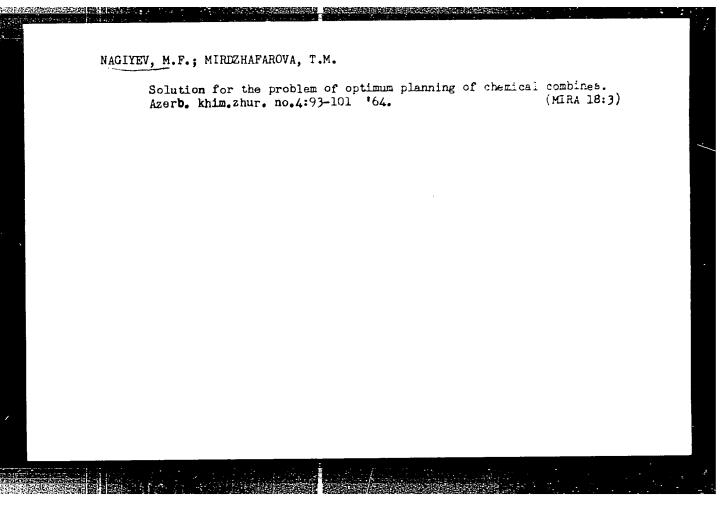
ManeDALIYEV, Yusuf Geydarovich, Laureat Gosudarstvennoy premii, nagrazhden o'denom Lenina, chlen-korrespondent AN SSSR, (1905-1961); NAGIYEV, M.F., akademik, red.; KULIYEV, A.M., nkademik, red.; ZUL'FUCARLY, D.I., prof., red.

[Selected works in three volumes] Izbrannye proizvedemiia v trekh tomakh. Baku, Izd-vo AN Azerb.SSK. Vol.1.
1964. 578 p. (MIRA 17:10)









NAGIYEV, M.F.; SHTEYNGEL', A.S., red.

[Theory of recycle processes in chemical engineering; methods of chemical engineering used in studying complex multistage reactions, and problems of the optimization of chemical combines] Uchenie o retsirkuliatsionnykh protsessakh v khimicheskoi tekhnologii; metody khimiko-tekhnologicheskogo issledovaniia kompleksnykh mnogostadiinykh reaktsii i voprosy optimizatsii khimicheskikh kombinatov. Baku, Azerbaidzhasnkoe gos.izd-vo, 1965. 474 p. (MIRA 18:8)

L 62775-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AP5013769

UR/0316/65/000/001/0057/0062

AUTHOR: Hagiyev, M. F.; Abbasova, B. G.; Kuliyeva, V. G.

9

TITIE: Effect of various factors on the catalytic process of hydrogen redistribution in a continuous chromatographic system for separation of cracked distillates

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 1, 1965, 57-62

TOPIC TAGS: hydrogen redistribution, aluminosilicate catalyst, kerosene upgrading, chemical stability, chemically stable fuel, chromatographic separation, stable fuel yield, space velocity, feed rate

ABSTRACT: The effect of temperature, space velocity, and feed rate on the efficiency of the hydrogen redistribution process in the presence of an aluminosilicate catalyst in <u>cracked kerosene</u>) and the yield and quality of upgraded products obtained in a continuous chromatographic system was investigated. The experimental results show that: 1) the reaction rate of hydrogen redistribution in cracked kerosenes is markedly higher than in cracked gasoline or gas oil distillates; 2) the efficiency of the process is low for distillates having a wide fractional composition; 3) the yield of upgraded liquid products with respect to temperature fluc-

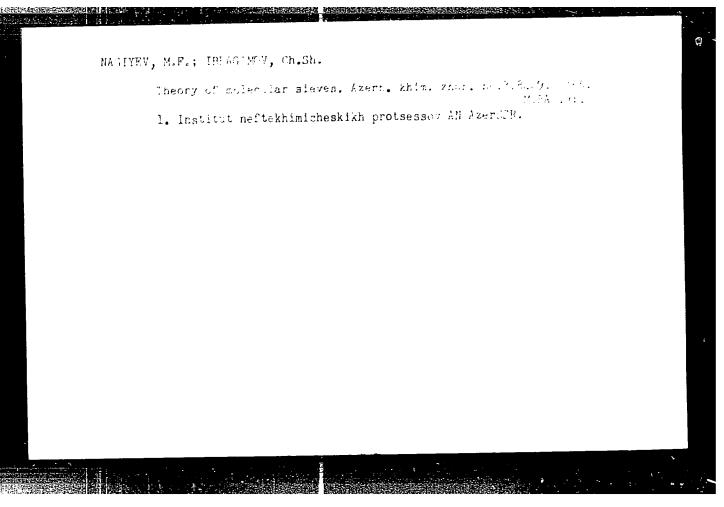
Card 1/2

ASSOCIATION: INKnP AN Azerb. SSR  SUBMITTED: 50Jun64 ENGL: 00 SUB CODE: FP  KO REF SOV: 013 OTHER: 001	SUB CODE: FP
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O REF SOV: 013 OTHER: 001	

NAGIYAV, M.P.; IBRAGIMOV, Ch.Sh.

Contribution to the theory of molecular sieves. /zerr. khom.
Zhur. no. 2:64-70 '65.

1. Institut neftekhimicheskikh protsessov AH Azerdár. Cahairted Dec. 7, 1964.



APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135920018-1"

NAGIYEV, M.F.; KULIYEVA, V.G.; MAMEDOVA, A.D.; MIRZOYAN, N.M.

Kinetic study of the means of intensification of the process of heterogeneous-catalytic synthesis of ethyl chloride. Azerb. (MIRA 18.17)

khim.zhur. no.4:45-50 '65. (MIRA 18.17)

1. Institut neftekhimicheskikh protsessov AN AZSSR. Submitted December 12, 1964.

ACC NR: AP7012436 SOURCE CODE: UR/0249 66 022 007 0014 0017

AUTHOR: Nagiyev, M. F.; Ibragimov, Ch. Sh.

ORG: Institute of Theoretical Froblems of Chemical Technology (Institut teoreticheskikh problem khimicheskoy tekhnologii)

TITLE: Role of capillary condensation in the over-all process of sorption

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 7, 1966, 14-17

TOPIC TAGS: adsorption, condensation reaction

SUB CODE: 07

ABSTRACT: This report is a continuation of a series of reports on research on adsorption. In the previously published works, problems related to physical adsorption on globular adsorbents having a highly dispersed structure were solved. In the present work, the role of capillary condensation is taken into account. The sorption volume is calculated from formulas representing a general case. A formula is derived for adsorbents with a complex structure where adsorption and capillary condensation take place simultaneously. Orig. art. has: 13 formulas. [JPN: 40,422]

Card 1/1

0932 1385

- NAGIYEV, M. R.

USSR / Cultivated Plants. Corcals. Μ

Abs Jour

: Ref Zhur - Biol., No 8, 1958, No 34615

Author

: Maglycv, M. R.

Inst

: AS AzorbSSR

Title

: Effect of Meteroological Factors on the Manifestation of Seed debility in Winter Wheat Under

Conditions of Irrigation.

Orig Pub

: Tr. 1-oy nauch, sessii Soveta po koordinazii AN AzerbSSR, 1957, 166-174.

Abstract

: Experiments, conducted by the Agricultural Institute of Azerbaijan, and on collective farms of the district of Mizamiaskiy during the years 1951 to 1954, have produced the following data: at atmosphoric temperatures of 17 to 30°C., a rolative humidity of 29 to 38%, and with winds up to 10 m per second during the phase of milky ripeness, seed debility in winter wheat did not

Card 1/2

27

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TTLE	The mobilem of the Effort of Mere colorical Factors on the Appearance of Understood Stain in winter Wheat Grown unlies contraction		
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(637cC7 :	The results are presented of phanes, and sereous exacts observation was in visional distribution when the winter wheat, green and the tringston, was in the milky and wray stayes. Met. Grossgical testors during the alast and way stages had no substantial information on the appearance of understand grain.	·	
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ABC. JUUR.	:	WinBiol., No.23 1958 No. 104695	1
AUTHOR	:	hagiyev, P. II.	!
INST. TITLE	:	The best Flanting for Corn in Foothill Re	gions.
orgo. Cua.	:	Elmi-tethn, m'lumnt b lleteni, Azerb, elm eyvandarlyg v beytarlyg inst., 1957, No.	1-t dgigat (2), 10-12
ABSTRACT	:		<u> </u>
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IBRAGIMOV, I.A.; NAGIYEV, Sh.A.

Analyzing factors affecting pyrolysis in an "ethylene regime" and determining the parameters of automatic control. izv. vys. ucheb. zav.; neft' i gaz 8 no.3:97-99 '65.

(MIRA 18:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

SULTANOVA, A.I.; NAGIYEV, T.M.

Initiated dehydrogenation of diethylbenzene over quartz. &zerb.

khim.zhur. no.4:85-88 '64.

(MIRA 18:3)